American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . *Virg.*

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From the Boston Cultivator.

DR. JACKSON'S REMARKS

AT THE TENTH AGRICULTURAL MEETING AT THE STATE HOUSE.

Concluded.

The most thorough analysis of guano, was made by Voelckl, and gave the following results:

Urate of ammonia,	9.0
Oxalate of ammonia,	10.6
Oxalate of lime,	7.0
Phosphate of ammonia,	6.0
Phos. Magnesia and ammonia,	2.6
Sulphate of potash,	5.5
Sulphate of soda,	3.8
Muriate of ammonia,	4.2
Phosphate of lime,	14.3
Clay and sand,	4.7
Undetermined organic matter, ⅛ of which is soluble in water, &c.	32.3
	100.

Considering the above analysis, and the saline matters of plants, I have been able to make an artificial compound, which I have no doubt will exceed in fertilizing properties, the natural guano. It can be made of any degree of strength required, and the cost will be reduced in proportion as the more expensive salts are omitted or diminished in quantity. The best kind I make as follows:

Estimated cost in a large way.

			Cents.
Bone ash,	15 lbs.	½ ct.	7
Carbonate of ammonia,	10 '	6 '	60
Phosphate of soda,	10 '	4 '	40
Sulphate of magnesia,	6 '	3 '	18
Muriate of ammonia,	5 '	9 '	45
Sulphate of soda.	3 '	1 '	3
Sulphate of potash,	5 '	3 '	15
Nitrate of soda,	5 '	4 '	20
Nitrate of potash,	2 '	6 '	12
Humate of potash,	20 '	3 '	60
Apocrenate and humate of am.	10 '	4 '	40
Oxide of manganese,	5 '	5 '	10
Peroxide of iron,	2 '	1 '	2
	100 lbs.		$3 32

By a complicated series of decompositions, this mixture becomes very similar in its properties to the natural guano.

The estimate of cost is made under the impression that crude articles only would be used, as prepared in the large way. The actual cost of the specimen I here exhibit, was much greater—such chemical articles being used as are sold in the apothecaries' shops, or made in the laboratory for the purpose.

The ingredients may be varied to suit the soil or the crop required. Thus I omit, in the specimen laid before you, the oxides of iron and manganese, which abound in New England salts. The following is the composition of a cheaper artificial guano, which has been prepared from my receipt, and sold in this city:

Nitrate of soda	20 lbs.
Muriate of ammonia,	10 '
Carb. ammonia,	5 '
Carb. potash,	5 '
Sulphate of soda,	8 '
Sulphate of magnesia,	5 '
Ground bones,	60 '
Salt,	10 '
Carb. iron and mnaganese,	3 ' 2oz.

These are mixed with peat or swamp muck, a sufficiency of gypsum being mixed to absorb the ammonia disengaged. Valentine mixes in two bushels of gypsum and a cartload of meadow-mud or street manure. This compost is said to have proved very successful in this vicinity, and is of but little cost—not more than a cent a pound.

My method of making artificial guano is as follows:—Take 10 pounds of common caustic potash, and dissolve it in boiling water in an iron pot placed over the fire. Then add 20 or 30 pounds of sawdust, stirring it well in. Boil until the whole forms a dark brown paste, and dry off; then take it out of the pot with a ladle. Then take 15 or 20 pounds of fine sifted ground bones or pulverized burnt bones, and mix them with the above described humate of potash. Add 10 pounds of the phosphate of soda, 6 pounds of Epsom salts, 10 pounds of carbonate of ammonia, 3 pounds of sulphate of soda, 5 pounds of sulphate of potash, 5 pounds of nitrate of soda, 2 pounds of nitrate of potash, and 5 pounds of fine peat, and rub them all into a powder. Then mix them intimately with the humate of potash and bone dust, before described. This will make the most concentrated manure known. It may be diluted with any quantity of peat or dry soil, that the farmer may think best. Peat is the best substance to mix with it to retain any gaseous matters that may be disposed to escape.

Peat may be mixed with potash and treated exactly like saw-dust and will make a good manure where the soil needs humus and potash. If the soil needs phosphates, ground bones may be boiled up with the mixture. This would be the the *cheapest* guano.

An infinite number of artificial compounds may be made on the principles I have already stated, by supplying the ingredients needed by plants and wanting in the soil.

I lay upon the table, Mr. President, some cartridges of artificial guano, made according to the *canons* of agricultural chemistry, which are at the service of the *great guns* here present, on condition that they will let us hear a *report* from them.

Each cartridge contains two ounces of artificial guano, sufficient, I suppose, for at least half a dozen hills of corn, (or if spread and raked into the surface,) for a piece of land about six feet square.

It should be mixed up with some dry soil, before it is used. I wish it tried against an equal weight of natural guano, on the same soil. It is best tried on the poorest soil, where its effects will be more manifest. If the first supply should prove inadequate for the ground assigned for the experiment, a second cartridge may be discharged on the soil.

Composition of two kinds of ashes.

OAK—*Q. robur.*		PINE—*P. Picea*	
Potash,	51.73	Potash,	21.75
Lime,	3.92	Soda,	6.76
Magnesia,	4.45	Lime,	1.54
Sea salt,	0 78	Magnesia,	16.79
Phosphate of iron,	2 09	Ox. of iron,	1.31
Sulphate of lime,	3.79	Phos. acid,	39 65
Phos. acid,	12.50	Salt,	0.57
Silex,	0.77	Silex,	11.71
Carb. acid,	14.26		
Coal and Sand,	4.28		99 88
	98.57.		

It will be seen that oak ashes contain a much larger proportion of alkaline matter than that of pine, and a less proportion of phosphoric acid. Hence they must have a very different action on soils. Leached ashes are deprived of much of the alkali, but still a very large proportoin of it remains in combination with silex, as silicate of potash. This is gradually dissolved, and rendered available to plants, through the action of carbonic acid and the acids of the soil. Ashes made at a high temperature, in stoves, are little valued by the soap-boiler, but after leaching, are more valuable to the farmer, because the leaching has not removed the alkali.

Phosphate of lime and bi-phos. of magnesia, remain undisolved in leached ashes, with a little phosphate of iron, silex and gypsum. These are slowly taken up by plants, and serve as nourishment.

Salt is also found in all ashes, end must have been originally derived from the soil. It is removed by water from leached ashes, and should be replaced by adding a small quantity of that substance.

Saline manures, which are very soluble, should always be mixed with the compost, instead of placing them directly on the soil.

Potash may be mixed with peat, or it may be combined with sawdust, with which it should be melted, until the whole mass forms a thick brown paste, soluble in water. This should be mixed with soil before spreading it on the land. It is humate of potash.

Carbonate of ammonia, and other ammoniacal salts, should be crushed to powder, and then may be mixed with peat, with which they form an excellent manure.

Ten pounds of carbonate of ammonia mixed with a cartload of peat or swamp muck, will be found to be a very strong and valuable manure, and if it is desirable to convert the carbonate into a sulphate, you have only to add a little gypsum, which will give up its sulphuric acid to the ammonia, while the lime is converted into a carbonate of lime. Pure carbonate of ammonia is worth a shilling a pound, but if desired for agriculture, a crude article can be prepared from the exhalations in burning bones, or from the refuse liquors of gas light establishments.

Sulphate of ammonia may also be obtained by adding sulphate of iron to putrid urine, the sulphuric acid taking the ammonia to form a sulphate, while the oxide of iron is thrown down as a carbonate of iron. The liquor being poured off and evaporated down, will give chrystals of sulphate of ammonia. It may be used directly as a liquid manure, or it may be mixed into the composts. It is also useful as a steep for seed, and aids the growth of the young plant.

Steeps and most of the saline manures, serve to give the young plant a vigorous growth, which it maintains subsequently on coarser food from the soil, while it possesses more power in appropriating carbonic acid of the air.

In treating peat bogs, several different methods have been used, each of which has its advocates, but few consider the different circumstances which render a particular method better in one situation than another. Some pare and burn, others cover with gravel or loam, while a third party maintains that the peat moss must be first inverted and rolled down hard, previous to any other treatment, and that if this is not done, the wild grasses and brakes will work their way through the gravel and loam laid on the surface. Now, I have seen each of these modes of operating, in numerous places, with variable success. When the layer of peat is thin, not more than a foot or two in thickness, a covering of subsoil, or of gravel, is amply sufficient to keep out the wild grasses, especially if a dressing of compost manure is spread over the surface, previous to sowing the bog with herdsgrass and red-top.

If the peat is covered with a light turf or moss, it takes a very large quantity of soil or gravel to bury it, and the application is apt to prove ineffectual. It is better, then, to turn over the turf, or if the bog is not too miry, the turf may be taken off and burnt, and the ashes may be restored to the bog.

In all cases it is essential that the springs around the bog should be cut off by marginal drains, and that the water should be lowered about three feet from the surface of the bog.

The nature of the gravel or subsoil that is laid on a peat bog, has also a considerable influence. Mere silicious sand and gravel have no corrective properties, and hence cannot do any other than a mechanical service. Gravel of undecomposed granite, may perform both a chemical and mechanical duty. Micaceous subsoil acts very much like ashes, in supplying potash and lime to the acids of peat.

In a deep bog, after thorough draining, it is generally best to break up the surface with a plow having a very sharp coulter, much like those used in the prairies of the West—or the turf may be cut quite rapidly before the plow, by means of a broad axe, and the plow may then follow; or the boy may be plowed when the surface is frozen to the depth of four inches. A roller should be afterwards passed over the surface, to crowd down the peat into a compact mass. It is then ready for a light top-dressing of subsoil and one of compost manure, after which it will be sure to take the grass-seed, if there is no noxious matter present in the peat, as is not unfrequently the case.

Sulphate of iron is sometimes so abundant in peat, as to prevent the growth of plants, and if this is the case, the bog must be heavily top-dressed with old mortar, air-slacked lime, marl, or ashes, which will not only remedy the evil, but will improve in the highest degree the quality of the bog, for the salts (sulphates) thus formed, are active fertilizers, while the carbonic acid given out by the decomposition of the carbonates, serves to nourish the green crop.

It may be known that peat contains any notable quantity of sulphate of iron, by observing—

First, that the ashes of the peat is of a brick red color.

Second, that the peat is very black and pasty.

Third, that the soil thrown up around the margin of the bog, is in dry weather covered with an efflorescence of sulphate of iron, or copperas, which may be known by the taste. Or it may be proved chemically, by leaching the peat and evaporating the solution until chrystals of copperas are obtained.

Sulphate of alumina also occurs in peat bogs, and is equally noxious with sulphate of iron. Both these salts kill plants. Pyritiferous marl, in Saco, first produced a luxuriant green crop, and then cut off all the roots, and destroyed the crop. This was owing, first, to the generation of carbonic acid from carbonate of lime, and formation of sulphate of lime—then, as there was not lime enough for the acid, the sulphate of iron gained the ascendancy, and killed and disorganized the roots.

Peat is valuable as a basis for compost, not only on account of the large proportion of vegetable matter which it contains, and the saline matters in it, but also because it retains moisture with great tenacity, the dry peat for fuel never containing less than 25 per cent. of water. It is, also, when dry, a good absorber and retainer of heat, and thus serves to maintain a higher temperature in the fields during the night. Charcoal has also this property, and land sprinkled with it, was proved by experimente I made ten years ago, to be of a higher temperature than that of the soil adjacent. The *color* of a soil has much influence as to its absorbing the sun's rays, and the nature of its ingredients determines its radiating and conducting properties. These points have not met with the attention they merit. Indeed, there are so many subjects yet uninvestigated, which are capable of explanation by exact experiments, that it would be wise economy for a State or the nation to establish an institution, where every doubtful question might be brought to the test of rational experiment. The joint labors of farmers, botanists and chemists, might do much towards the improvement of the science of agriculture.

The worst peat makes the best manure, when the farmer knows how to manage it. The operations are not costly, but he must *know what to do.* Hence the value of science to the practical farmer. He should know how to make the most of the things about him. Science teaches the best economy, and I have no doubt that it will soon very materially improve the art of agriculture—especially in New England, where the farmer must operate skillfully or give up business. I am glad to see that the march of improvement is onward, and that the young farmer is now endeavoring to avail himself of the latest improvements, in science and the arts.

From the last Annual Report of the Commissioner of Patents.

Cultivation of Celery.

New York, December 12, 1844.

Dear Sir : The cultivation and growth of celery, that most excellent and wholesome winter vegetable, requires close attention of the gardener to bring it to perfection.

A practical gardener will soon learn the art; and for the benefit of those who have yet to learn it, I beg to hand you the result of my own experience for the last 25 years.

In this country, it is not necessary to sow the seed before the month of May, and then in the open ground, well manured with stable dung thoroughly cured, and not less than a year old. The color, whether white or red, is a matter of taste. I generally mix my seed, and thus have both species. The seed is slow of vegetation, but, if good, never fails to germinate. Whether the seed be sown broadcast or in drills, is a matter of no consequence; as the seed being very small, the plants are sure to shoot up thick. So soon as the sprouts have attained the height of an inch, they should be pricked out in a bed of rich mould, at the distance of about three inches each way from each other. You cannot have good strong stocky plants without pursuing this method. If left standing in the seedling-bed, they will grow spindling, weak, and consumptive. No more attention is required, excepting that of keeping the plants perfectly free from weeds, until August, when you will find the plants strong, healthy, and vigorous. Any time in this month, dig your trenches 18 inches deep and as many wide. For this purpose, I generally occupy the ground that has been used for early peas.

The quality of the celery, and chiefly its growth, depend entirely upon stable manure. I have found the manure used for early hot-beds the best. It never fails of success. The increased fermentation of the manure, by the repeated waterings of the beds, the escape of ammonia and noxious qualities of the manure, renders it sweet, and capable of imparting the mildest and richest flavor to the plant. If fresh manure from the yard, of whatever kind, is used, the celery will invariably grow strong and rank, with as little delicacy of flavor as there is in the manure. With a garden fork of four tine, strike through the manure in the trench into the earth beneath, and bring it up fresh, carefully mixing it with the manure as you proceed from one end of the trench to the other. Attention to this point is indispensable to the growth of good celery.

The plants taken up should be trimmed about the crown, just at the top of the root; all the young suckers taken off, leaving the plant trim and neat, with all its main stalks. With a dibble, which should be as large as the handle of a spade, as the roots will now be of considerable size, begin at one end of the trench with your face towards the other, and set in a single row of plants in the middle of the trench, and not less than six inches asunder; water them well. No teetotaller loves water better than celery. It cannot have too much The roots of this plant require more room than is generally allowed them, as any one may see when they are taken up for the table.

Earthing up the plants should be delayed until they have attained a good size; and then it requires care, especially the first time. I always get into the trench myself, and, holding the plant with all its stalks firmly in my left hand, with a short-handled small hoe draw the earth up round the plant, without allowing it to come in between the stalks. When this is done, and the plants thus protected, you may with a spade, strike off the edges of the trench, and partially fill it. As the plant grows, (as it now will, if well watered in dry weather, with great vigor,) continue to earth up, and by the first of November the plants will be two feet above the level of the earth, with a main stalk the size of a man's arm.

Sometimes, particularly if the season be dry, celery is liable to be attacked by a fly. In that case, you will see the tops of the celery turn brown and wither. The moment that symptom appears, no time is to be lost in calling in the doctor; for the whole crop is at stake. The cause of the disease is the sting of a fly upon the leaves of the celery. The egg is deposited between the integuments of the leaf, and soon hatches a small white worm—sometimes visible on opening the leaf to the naked eye, always by the aid of a microscope. If not attended to, the disease gradually descends to the root, and the whole plant falls a sacrifice. Amputate every defective and diseased leaf; and early in the morning, whilst the dew is on, sift on the whole of the plants fresh slacked lime. One such powdering is generally sufficient; but if not, give them another dose, and the first rain that falls will wash the plants clean, and you will probably see them fresh, green, and stretching away towards maturity.

With regard to the mode of securing the crop for winter use, gentlemen have their fancies. I prefer leaving the plants in their original trenches, earthing up to the top of the plants, and covering with straw litter and boards, so as to protect them sufficiently from the frost, to be able to take them up as wanted; and this always fresh and sweet. I do not fancy disturbing the roots, and transplanting into narrow quarters.

Finally, any one in this country who wishes to have "first rate" celery must cultivate it himself. Common laborers are sure to spoil it. Professional gardners are seldom found, and generally too expensive when they are.

Your obedient servant,

Junius Smith.

Hon. H. L. Ellsworth.

Professor Johnson's Lectures in Ayr—*The organic part of plants—the inorganic part of plants—improvement of the soil.*

Mr. John P. Norton, a European correspondent of the Albany Cultivator, gives the following sketch of a series of lectures recently delivered by Professor Johnson to the farmers of Ayrshire, Scotland:

The first was upon the organic part of plants—This organic portion of all vegetable bodies is separable into starch, gluten, woody fibre, gum, sugar, &c. By the simple experiment of burning sugar, one of these bodies, it is shown that it resolves itself into carbon or charcoal and water; the same is true of woody fibre, starch, and a great proportion of vegetable bodies. The properties of charcoal were explained, and the two gases of which water is composed, oxygen and hydrogen, were exhibited through their more striking phenomena. In gluten and other vegetable bodies, we have a fourth ingredient, nitrogen; this was also shown, and the method of its formation explained. We see then, that the organic, which is far the larger portion of plants, consists of four substances, carbon, hydrogen, oxygen and nitrogen. Plants collect these indispensable materials in various ways; the carbon chiefly through the leaves in the form of carbonic acid gas —oxygen and hydrogen through the roots, also in the form of ammonia, or other compounds. The decay of various substances, and the vegetable acids present in the soil, also supply a certain amount of *all* these bodies.

Lecture 2d, was upon the inorganic part of plants and soils—When we burn a quantity of vegetable matter, far the greater portion is driven away, but something always remains. This, though a small part of the whole, is indispensable; it is as absolutely essential as the glue or nails of the carpenter, or mortar of the mason; plants cannot live long entirely without *some*, though the proportions in which they require it, vary. This inorganic portion consists of eleven substances: potash, soda, lime, magnesia, alumina, oxide of iron, oxide of manganese, silica, sulphuric acid, phosphoric acid, and chlorine; other things are rarely present. The organic portion is derived chiefly from the air, but partly from the soil; but this comes wholly from the soil. Every fertile soil then must possess the above constituents, and a soil which does not will not grow good crops. If rich in all of the others, but deficient in one, lime for instance, it will not nourish a healthy grain or root crop. Thus we may have a soil that may at once be made fertile, by the addition of some one absent ingredient. Here chemical analysis comes to the farmer's aid, and is able to tell him the best and most economical method of improvement.

Lecture 3d, pointed out the ways by which the soil is to be improved—Although, as has been stated, some soils only require the addition of a special ingredient to bring them at once into a state of fertility, others are in need of many things. In many instances a soil contains every thing necessary for the nourishment of plants; but will not grow them on account of its physical condition; there may be a superabundance of water—this is to be removed by means of the drain; there may be some excess of acid or noxious mineral substance—these too are to be removed by drains, put in, not because of wetness, but that the rain may descend quickly into them, and carry

these substances away with it. Great benefit is also to be derived from thorough stirring and pulverization of the soil, to the greatest possible depth. Sometimes the subsoil is more fertile than the upper, and may be brought to the surface with much advantage. Green cropping, is another most valuable and economical means of improvement. Vegetable matter is thus supplied at the expense of the atmosphere; and the long roots bring up inorganic substances from the subsoil. If we do not return to the soil, both the liquid and solid manure from animals, we do not return all that we have taken away, and it will sooner or later show a deficiency.

Lecture 4th. treated of the purposes to which the crops raised are applied, that is, to the food and sustenance of animals—We find that the muscle, blood and bones of animals also consist of an organic and inorganic part; this organic and this inorganic part, respectively contain the same constituents as the corresponding parts of the food, and not only of the food, but of the soil; here, then, we have a complete and beautiful chain. The soil and the air build up the plant, the plant builds up the animal frame. The food having fulfilled its purpose in the nourishment of the animal, is rejected, returns to the earth again, and commences its round anew. With a knowledge of the constituent parts of the animal, we are able, having the same knowledge of the vegetable, to adapt our food to the purpose required. To the growing animal, we would give food, rich in phosphates, to build up bones, in gluten to form muscle; to the fattening animal, we would give in addition, something rich in oil and fat. These things are all ready formed in the plant; in fact, it is a workshop to prepare materials for rearing and supporting the body; our part is the selection alone.

From the Boston Cultivator.

The Chester County Hog.

Messrs Editors:—Your readers are much indebted for a portrait of the white Chester or Delaware County Hog, which is likely to obtain a footing amongst us and to hold it, if "large size and early maturity" be in reality what our friends of the improved Berkshire have ever assured us, of primary importance; and I shall soon expect to hear enquiries for the legitimate breed from all parts of this country. That the breed is very superior, I have the best reason to conclude, having known them from their "birth, parentage, education, life, character, and behavior" at the *scales*, where, as at Smithfield, prejudice never comes, yet, let it not be forgotten, there are many individuals, even of this famous breed, that if taken out of the streets would be a dishonor to their friends, here as elsewhere. The fact is, it is seldom indeed that the pigs of a whole breed are worth the rearing; care should therefore be taken to select the best, and sacrifice the remainder as Roasters.—But a friend at my elbow intimates, that although sound in doctrine, the precept would be hard to practice, if $20 a pair were offered, with orders on book too numerous to fill. It may be so, and I will therefore just hint to our friends who intend to go into the "Chestertonians"—permit me to be the author of a cognomen that might be destined to live in the annals of the hog book—it will be wise to see for themselves, and not send their orders, otherwise, they also may be doomed to buy "a pig in a poke."

I have said, the Chester or Delaware county white hog has the character of large size and early maturity; and here follow a few instances amongst a thousand, as a proof of the fact; the account given with your admirable portrait, distancing, in my opinion, the best of them, for assuredly, a hog to weigh 767 lbs. at one year and ten months old, and before quite ripe, is indeed monstrous. The following are the weights of six, that were mere *children* in age, and were bred and fed by a native of Delaware county residing in Newtown, viz.

No 1	under 8 months	252
" 2	" "	275
" 3	8 months	300
" 4	"	297
" 5	8 months 1 week	341
" 6	8 months	310

But now come their Progenitors—perhaps their *great* uncles or aunts, or *grand* sires, and which are indeed deserving the epithet. Homer Eachers, himself a Delaware county man, and an excellent manager, and withal a very noted hog-breeder, states as a fact, that three hogs of the pure white breed of Delaware county were slaughtered by two of his neighbors, whose weights and ages were as follows, viz.

No 1	2 years and 5 months	879
" 2	both of the same litter	866½
" 3	no age given	929½

This, after being dressed for market.

Mr. Eachers remarks—what perhaps no Improved Berkshire breeder will thank him for—"These hogs were pure white and made no pretensions whatever to an alliance with the boasted Berkshires of other places."

Apropos, while speaking of white hogs; will it be permitted me to enquire, what has become of the large white Boar, WINDSOR CASTLE, imported some time since by Mr. Allen, of the American Agriculturist? and of which I have since heard nothing more, than that persons were all going to "speak at once" for the pigs, to be raised from that famous English breed. In conclusion, I would observe, the Chester county or Delaware county white hog seems to be of as pure and distinct a breed as our own New England red cattle, and will bear as well the close breeding, to which they must have been submitted and often, without deterioration—a most valuable property, and of the highest importance, especially in the hog, no animal running so fast out of breed, as every practical man must have observed to his cost; many a family being "out of Lard" from that circumstance.

Your Subscriber, D. F.

Springfield, Mass.

Power of Smell in Insects.—Every one is aware that in nearly every insect the sense of smell is remarkably acute. This seems to be necessary as a guide to their food; the more requisite as their range of vision, must, in most instances, from the nature of the case, be quite limited. Thus the bee discovers honey at a great distance, and makes her way to it with the greatest certainty. The bee-hunter avails himself of this acuteness of smell, and by exposing honey alone, or burning the comb to more rapidly extend the odor, discovers whether there are any bee-trees, or deposits of honey, in the vicinity. So the ant, the pest of the housewife, is almost sure to discover and lay under contribution the family stores of sweets, unless frequently looked to, or carefully guarded against. The flies, particularly the flesh fly, (*muscu carnaria,*) furnish abundant proof of a liberal endowment of this sense, by the facility with which they discover any substances suitable for their food, or a place of deposit for their young. It is commonly said, instinct is infallible; but that of the *nusca carnaria* is proved to be at fault, when deceived by the carrion-like smell of the mushroom, *phallus canis*, it deposits its egg upon it in the belief that it will provide suitable food for its young.

This power of acuteness of smell in insects may be used against them, or as a means of driving them from plants or places where they are numerous or troublesome; for it is well known that while they are attracted by some substances or odors, there are others extremely offensive to them, and which they will, if possible, avoid. Thus most of the essential oils of plants, or the materials that furnish them, are extremely disagreeable in most instances. Camphor, cammomile, tobacco, red cedar, black birch, sulphur, musk, &c. are among the materials offensive to many classes of insects, and may be used successfully against them. Thus the fumigation of plants or the exposing them to the vapor of tobacco, will speedily expel the green fly or aphides, or destroy them; and the fumes of sulphur will operate as effectually on the red spider, an insect at times very troublesome to the gardener. Professors Henslow and Lindley, both affirm, that the vapor of oil of turpentine is a sudden and total destruction to the wasp which produces so much trouble and mischief in a green house, or conservatory. Bureaus, or book cases, should in part be made of red cedar, as the powerful odor of this wood is very offensive to moths, which attacks furs or the binding of books.

Russia leather, which derives its smell from a thorough impregnation with the oil and smoke of the black birch, is valuable for the same purpose, and a few shreds of it scattered among books, or drawers, is one of the best preventives yet known, to attacks of the paper or book moth. The Orangery of Sir Charles Monck had been for several years much injured by the brown scale insect, (a variety of the same that attacks apple trees,) when as an experiment, he suspended among the branches a quantity of cammomile, and syringed others with an infusion of this strong smelling herb. The result was, that his trees were almost entirely freed from the insect, the young scales turning dry and black and falling off. Tanzy we know is a strong repellant to many insects that infest our gardens; and it is very probable that most of the strong scented, or aromatic plants, would be found repulsive if not destructive to some of the insect tribes that harrass and injure the crops of the farmer, gardener, and fruit grower. Experiments on the smell of these depradators might easily be made, and if the result serew not satisfactory, they could not be injurious or expensive.—*Albany Cultivator.*

Rules for Application of Guano.

1. If intended for drill husbandry, or to be used in the hill, it should be mixed in the proportion of 1 part guano to 4 or 5 parts of woody earth, or mould, or any other fertile earth, or thoroughly decomposed manure—or 1 part guano, 1 part ashes, and 3 parts rich mould or well-rotted manure.

2. It is best, for the above purposes, not to let the mixture come in immediate contact with the seed.

3. For broadcast application, it may be sown as plaster is, after it shall have been reduced into powder, either by itself, or in compost, as prescribed in rule number 1. Whether used alone or in compost, it should be sown and harrowed in after the crop may have been sown and ploughed in.

4. It may be sown in compost after a crop may have come up.

5. It is a good and highly fertilizing manure for all descriptions of crops, whether grain, grass, or roots; and, if properly used, will not only increase the quantity of product, but improve the quality also.

6. For root crops, 200 pounds used in compost as named in rule No. 1, is sufficiant for an acre of corn, if used in the drill or hill.

7. For wheat, rye, oats, barley, tobacco, or any other grass crops, from 200 to 300 pounds, according to the quality of the land, will be found sufficient for an acre.

8. It should, if possible, always be applied in *wet* weather, and covered lightly with either plough or harrow. Where neither of these modes may be practicable after sowing guano, the roller should be applied.

9. In applying it to the old meadows, or meadows which may have been set for some time, it should be harrowed in and then rolled.

10. If convenient, plaster may be very advantageously used with it, in the proportion of 1 bushel of plaster to 100 pounds of guano.

11. In applying it to grass lands and meadows, the month of April would be the most suitable period, as a great object is to dissolve it, in order that its virtues may promptly come it contact with the roots of the plants. It may however, be used at any *wet* season.

12. Any compost made of guano should remain a few days before being used.

13. Where liquid application of guano may be desirable, as on tobacco beds, or in gardens, 1 pound of guano dissolved in 4 gallons of water will comprise a most enriching manure. The sediment remaining, if any, may very advantageously be with an equal quantity of water as at first used.

14. Where plaster cannot be obtained to incorporate with the guano, a most excellent substitute may be found in pulverized charcoal, to be used in the same proportion as plaster.

Potato Rolls.—Take five middle size potatoes—boil, peel, and mash them. Then rub the mashed potatoes through a sieve. To each potato, allow a pint of sifted flour; a table spoonful of strong fresh yeast, a gill of milk-warm water, a salt spoon of salt, the yolk of an egg, and a bit of fresh butter, about the size of a large hickory nut. Mix together the flour, the mashed potatoes and the salt, in a large broad pan. Make a hole in the centre of the mixture, and pour into it the yeast mixed with the warm water—Sprinkle a little flour over the top, and mix in a little from round the sides of the hole. Cover it with a clean towel, and over that a flannel, and set it near the fire to rise. When the dough is quite light, and cracked all over the surface knead in the yolks of eggs (having first beaten them well) and also the butter. Then divide the dough, and make it into long shaped rolls. Cover them, and set them again to rise in a warm place. When perfectly light, lay them in a pan sprinkled with flour, and bake them well. They are best when quite fresh.

THE AMERICAN FARMER.

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REMOVAL.

☞ *The premises on which our office was located, is in process of improvement, and we have consequently been compelled to remove—We may now be found at the N. E. corner of Charles & Baltimore sts. (entrance in Charles street) over the Auction Room—where we shall be happy to attend to the calls of our friends.*

DR. JACKSON'S ESSAY—*Guano, real and artificial—Treatment of Manure piles—Action of Plaster and Charcoal.*

We conclude to-day the very able essay read before the members of the Massachusetts' legislature, on the occasion of their tenth Agricultural Conversation, and we would particularly direct the attention of our readers to it. The *analysis* which Dr. Jackson gives of Guano, is highly interesting. By it, it will be perceived, that *ammonia* is present in this admirable fertilizer in no less than *five* seperate and distinct forms; some volatile and evanescent in their natures, and, therefore, calculated to be taken up promptly as food by the plants, whilst there are others in a fixed state, subject to be acted upon by other agents, in their chemical relations and compounds, to be brought into the service of the plants by slower and more retarded processes, and forming, as it were, latent resources of fertility, to be drawn upon at remote periods, and as the necessities of the crops may require their aid.

By summing up the various forms of *ammonia*, which exist therein, it will be found, that it comprises nearly *one third* of the constituent elements of *Guano*; hence the reflecting culturist is at once apprized, of the why and the wherefore that this manure exerts so potential an influence upon the growth of plants, as well as in the fructification of their fruits. We are told by the highest and most approved authorities, that the *principle* in all animal, vegetable, and putrescent manures, which is most active and essential to the nurturing of vegetable life, is *ammonia*; and if that be true—and we think there can be no question of it—it follows as a natural corollary, that that manure must be best, which concentrates in itself the most of this life-giving and fruit-producing principle.

Let us look this subject in the face, and examine it in a common sense way. It is an all-important one, and deserves the most profound consideration. Let us take two heaps of horse dung, of equal quantities and quality,—the one has been carelessly thrown out of the stable window, to be drenched in rain, and fire-fanged by the combined influence of heat and air—the other has been carefully placed under cover from the weather, and preserved in a temperature which kept down decomposition and decay. Take a common farm hand to these respective heaps; let him turn them over with his dung fork, and if you ask him which is *best?* with unerring certainty he will tell you, that the one which has been excluded from sun and air is fat, unctuous and rich, and that the other, is little better than chaff—ask him why? and he will tell you, that it is fire-fanged and burnt up—its white and mouldy appearance assures him of these facts, though, perhaps, he will be unable to assign any philosophic or reasonable grounds for his opinion. He judges by the *effect*, without taxing his mind to delve into the *cause*; not being able to give you the *modus operandi* by which the first heap had been deprived of its fertilizing properties. Ask a chemist, however, and he will explain the mystery, by pointing out to you, that, owing to an excess of heat, and the presence of moisture, decomposition had been carried on with such *celerity* as to drive off the ammonia, and leave the mass an almost inert body of partially burnt matter, which, if used as *manure*, cannot but disappoint the expectations of him who may use it as such, it having been, by the process we have named, robbed of its most valuable elements. If any one should ask, how he is to ascertain when a dung heap is being deprived of its riches? we reply, that, whenever a strong pungent smell fixes upon his organs of smelling, as does hartshorn when applied to the nose, then he may conclude, that he is losing the most valuable part of his manure heap, and that if he desires to preserve it, he must take the trouble to absorb and arrest its escape. This can be done with but little labor and less expense. We will lay down an easy and cheap plan. Let him mix with his horse and other dung, in equal portions, layer and layer about, any rich earth or mould, and as he does so, let him have ground plaster, or pulverized charcoal, sifted over each layer, in the proportion of a bushel of the first and two of the latter, to every twenty loads of dung thus mixed with the earth or mould. The act of turning the mass over, will relieve it of its superabundant heat, while the plaster or gypsum will absorb, fix, and assimilate itself with all gaseous formations of ammonia as they may arise, thus not only arrest their escape, but husband them for the future purposes of vegetation. The manure heap, when thus re-formed, should be covered over, some eight or ten inches, with earth of some kind; the whole to present a cone-like shape, so as to carry off the water. Manure piles thus made up, may be left for months and they will sustain no impairment in quality, and will possess this advantage,—every load of earth and mould, which may be added to the horse or other dung, will be as intrinsically valuable as the dung itself, and, indeed, more so, because the fertilizing principles which they may absorb, will be so *fixed* as not to be liable to escape when submitted to the action of the air, as it may be applied to the soil, and will, therefore, as a necessary consequence, retain their virtues much longer than would the stable dung in its simple form.

The late Col. John Taylor, of Caroline, Virginia, in speaking of the agricultural virtues of plaster, remarked, that he found as much benefit from it when mixed with his barn-yard manure, as in any other way he had used it. He, observant and keen-sighted as he was—and no farmer of his day was more so—did not probably know wherein it was so serviceable, but merely noticed the fact; for chemistry, in its applications to the purposes of agriculture, was then in its infancy, so that the peculiar properties of plaster, as an absorbent, and assimilator, and its competency to give *fixedness* to the gaseous, and, therefore, volatile parts of putrescent manures, in the process of decay, were unknown. He saw the effects of his practice, was content, and gave the results of that practice for others to profit by. Had he been connusant of the peculiar province exerted by plaster, in preventing the loss of the essential principle of fertility, instead of expressing the opinion, that plaster, thus used, was as profitably applied to the ground, as in any other way, he would promptly have discovered, and as promptly proclaimed the fact, that it added a hundred per cent. in value to his stable and other dung.

But we must return to Dr. Jackson's analysis of *Guano*, or rather to that which he considers the most thorough one yet made.

Besides possessing *ammonia*, in five forms, it combines *lime* in *two* forms, the *oxalate of lime*, and the *phosphate of lime*, the latter of which is, doubtless, the most valuable one of the entire series, as it is that which gives to *bone dust* its greatest power as a fertilizer, because it is that among all the mineral salts the most scarce, and therefore the most desirable. Upwards of *fourteen per cent.* of it we find, by this analysis, to be present in *Guano*, and no doubt furnished by the bones of the fish upon which the birds feed which are said to be the depositers of it.

Again. In addition to the before enumerated valuable salts, Guano combines in its notable compound, the *phosphate of Magnesia*, *sulphate of potash*, and *sulphate of soda*, each and all of which are valuable agents in the creation of fertility in soils, as also, 32 per cent. of undetermined *organic matter*, one-eighth of which being soluble in water, is available as agents in the enrichment of the soil.

So much for that part of Dr. Jackson's essay which relates to the *real* Peruvian Guano, and, we will now bring to the notice of the reader, the *recipes* for making an *artificial Guano*, which, judging from the substances detected in the former, he believes will prove as good and effective, in the melioration of land, as the genuine article, and as all the articles he names may be obtained in the shops, his intimation may prove of essential benefit to those whose location may prevent their obtaining a supply of the genuine article; for if the *artificial* possess equal enriching properties as does the *real*, we see no reason why "that which we call a rose may not smell as sweet by any other name."

Dr. Jackson's plans for reclaiming bogs and peatty lands is worthy of all attention, and with this remark we commend his essay to the careful perusal and study of all farmers who are not too wise to learn.

COMPOST FOR WHEAT.

For every acre of clayey ground which you intend to put in wheat, prepare enough compost, as follows, to allow a dressing of ten double horse cart loads, say of 40 bushels each.

Take 10 loads of loam from the woods, or the same quantity of rich mould, or well rotted manure,

1 bushel of salt,
10 bushels of Charcoal,
1 bushel of Plaster,
10 bushels of ground Bones,
10 bushels of lime, and
10 bushels of ashes.

Let these be well incorporated together; after letting the whole remain a few days, turn over the mass, and, as mixed together, add twenty gallons of urine to each ten loads, taking care to sprinkle plaster over it as the operation is being performed. A compost thus formed, will comprise all the constituent elements which the wheat needs, either for the formation of the straw or *berry*, and will prove to be the means of greatly increasing the *quantity* and *quality* of the product of the latter, while it will also tend to maintain fertility in the soil for several years, and thus augment the yield of subsequent crops, whether they be grass or grain.

The above would be an admirable mixture also for a corn crop.

WASH FOR THE HAIR.

Take a quart of uncolored *New England Rum*, and ¼ oz. oil of Burgamot, put the two ingredients into a quart glass vessel, shake the vessel well, so as to dissolve the oil of burgamot, and incorporate it with the Rum, and you will have prepared one of the best washes for the human hair that ever was applied to the head of maid, matron, or bachelor. We do not say that it will restore a rich and luxuriant head of hair to a bald-pate; but we will tell what we do know of it. It is many years since that a friend of ours told us, in a tone of regret that bespoke the solicitude of his mind, that his daughter—a blooming widow of some twenty four winters—was fast loosing her hair, and he feared she would be bald. "Not so fast my good sir, let her do as I tell you, and she will soon arrest the evil you complain of." We gave him the above recipe, with directions that his daughter should bathe her head with it twice a day, for a few weeks. We thought no more of our nostrum until a month or two afterwards, when, on meeting our friend, he assured us that it had acted like a charm, that it had not only stopt the coming out of his daughter's hair, but restored it to its former luxuriance, and that he was charged with the tender of her

thanks. And think ye not, that we did not prize them "above much fine gold," for let us tell you, that gold, in our eye, is as *dross*, when compared with the *gratitude* of a woman's heart; as of all things of earth, there is nothing so pure and so holy, as is the alembic in which it is distilled.

Almond Cheese Cake.

Put 4 ounces of blanched sweet almonds into cold water, pound them in a marble mortar, add a tea spoonful of rose water and 4 oz. of loaf sugar and the yolks of 4 eggs beat fine. Work the whole till it becomes frothy, and then make a rich puff paste as follows: Take ½ lb. of flour and a ¼ lb. of butter: rub a little of the butter into the flour, mix it stiff with cold water, and then roll out the paste. Strew on a little flour and lay over it in thin bits one-third of the butter; throw a little more flour over the bottom and do the like three times. Put the paste into tins, grate sugar over them and bake them gently.

Sponge Biscuits.

Beat the *yolks* of 2 eggs for half an hour; then put in 1½ lbs. of grated loaf sugar, and whisk it till it rises in bubbles; beat the *whites* to a strong froth, and whisk them well with the sugar and yolks, then work in 4 oz. of flour with the rinds of two lemons grated. Bake them in tin moulds buttered, in a quick oven, for an hour; before they are quite done sift a little fine loaf sugar over them.

The Wheat Insect.

A correspondent of the New York Mirror gives the following account of an occurrence which came under his own notice and which may serve to throw some light upon the nature and character of that plague of farmers, the wheat insect. He says:

"In the spring of 1844, I placed a bag containing half a bushel of white flint wheat in a seed drawer under glass and near the furnace of my green-house. On the 6th of March 1845, I opened the bag, and to my surprise found thousands of living insects such as are now presented to you—some were on the point of leaving the kernel, others were just commencing to eat through, and many were perfectly formed and running about in all directions. Six years ago, I was in the habit of soaking my early grains in salt brine for the purpose of destroying the egg of the insect which I assured my neighbors much to their amusement and unbelief *was* ensconced in the kernel. Now by accident, the fact is made manifest. The insect would not have appeared until June perhaps, had the wheat been sown. The warm situation it occupied in the green-house, brought it thus early to maturity."

[The above paragraph is going the rounds. By some, the fact which it discloses is considered as a wonderful discovery, while, by others, the deduction is drawn from it, that the insect described by the writer, is the *Hessian Fly*, and that the *egg* of that insect is deposited on the kernel of the wheat. We insert it, to say, that the *insect* which was warmed into life by the fire of the *writer's* green-house furnace, was nothing more nor less than the *weevil*, and has no affinity whatever with the Hessian Fly. The *soaking* of seed wheat in *brine*, is an excellent practice, and would doubtless destroy the egg of the weevil. but could not exert the least influence upon the Hessian fly, and for the very satisfactory reason, that its abiding place, in its embryo state, is not upon the kernel of the wheat. It is a fact universally tested by the experience and observation of wheat growers, that *brined* wheat, is just as subject to the ravages of the Hessian fly, as is that which is *not* brined.

Seed wheat, in our opinion, should never be sown without being both *brined* and *limed*, as these operations destroy the fungus of Smut, while they accelerate the process of germination, and measurably protects the young plant from the ravages of the worm.—*Editor Amer. Farmer.*]

Every farmer should have a tool-house.

How to Raise Turkeys.

The attention of our readers has been repeatedly called to the subject of raising poultry—in the vicinity of our large cities, perhaps no stock is so profitable. Some good practical hints may be taken from the following, which the editor of the New Jersey Journal gives as the result of considerable experience of his own. The young turkey is proverbially a tender chick, and it is a nice matter to know how to manage him properly.—*Far. Cab.*

We believe it is common among farmers to say that a turkey's head costs twice as much as its body is worth when fattened. This we do not believe to be true, if he is properly managed; but on the contrary, we believe that nothing can be raised and turned to so great a profit. But turkeys must have care, especially when young; but this care will not entrench on the business of the farmer, as it may be done by females or the younger branches of the family—and beside, the little damage they may do to grass or other things, must not be magnified tenfold, as is usually the case. But by proper attention they will do no damage at all.

Before giving our rules to be observed in raising turkeys let us draw a comparison. There are but few farmers but can raise 100 turkeys,—these 100 turkeys will weigh, when fattened, in December, upon an average, seven and a half pounds each, full dressed. We say *full dressed*, for it is the practice in some places to divest the turkey of nothing but its head and feathers, and then take it to market. A practice as uncivilized as it is disgusting. These hundred turkeys then will weigh 750 lbs., which in market are equal to 1,500 lbs. of pork. But if the male turkeys are kept until February or March, they will not only increase in weight, twice the amount of their feed, but the price in market will be much higher.

We will now give the rules to be observed in raising and fattening them, founded wholly on our experience. Turkeys intended for breeders, must be kept well during the winter. If put in good condition, however, in December, it takes but little feed to keep them so. Their nests for laying must be made with hay or oat straw under cover, and well protected from the weather, and from vermin. When incubation commences, the turkeys must not be disturbed, and if she does not come from her nest for food and water, she must have both placed by her on her nest. When the young turkeys are hatched, they may be allowed to remain one day on the nest, or if removed, let them be sheltered in a warm place, and plenty of straw for them to sit upon, for they are now extremely liable to take cold. The second day feed them with curds, or warm clabbered milk mixed with a little Indian or barley meal. They must be kept up and fed in this way for two or three days, and longer if the weather should be cold or rainy, but as soon as a warm and pleasant day comes, let them out at nine or ten o'clock, and shut them up at four—and this practice of letting them out and shutting up *must* be followed for five or six weeks, and on no account let them get wet. When a young turkey begins to droop there is but little hope for it. There is no danger of keeping them too warm. When they are five or six weeks old put a little grease on their heads to preserve them from lice.

At the age of six or eight weeks the turkey is more hardy, but still should not be exposed to rains or the damp nights, for a few weeks longer. If the farmer has a plot of grass, let him enclose a yard with a high fence, and crop the wings of the old turkeys, and continue to feed them with clabbered milk, and whatever else he pleases that comes from the kitchen, such as broken bread, potatoes, and the like. If he has a clover field, as soon as it is mown, let them run on it, and they will live on young clover. And as soon as the crops are off the ground, say in August or September, let them range on the farm; but see to it, that they come to their roosting place at night, and have water.

In December the turkeys will be large enough to fatten, and for this purpose select as many as you please, and shut them up,—next take to the mill a few bushels of *ears* of Indian corn and have it ground—then boil potatoes, and mix the meal with the scalding water and potatoes in a tub, say in the proportion of one bushel potatoes to one peck or more of meal, and stir them well together, then let it cool, but give it to the turkeys as warm as they will bear it, and as much as they will eat, and in two weeks and a half, they will be fat enough for market, and for an alderman's dinner.

We do not take this from books, but from several years experience. We kept an exact account of the expense of raising and fattening a flock, and at the rate of ten cents a pound full dressed—we received $72, while our cost exclusive of sour milk, was less than $10. If any farmer does not wish to be at the *special* trouble of raising them, but should have a small flock to fatten, that have lived "in spite of wind and weather," let him adopt our rules of fattening, and he will "save much corn." On a large farm, and with a large yard and a butter dairy with proper attention, we believe it may be made a leading business to great profit.

Cultivation of Asparagus.

Mr. Marshall Stearns, of Brookline, who is well skilled is raising vegetables, manages asparagus as follows. For soil he prefers a deep sandy loam, inclining to yellow, well subdued and finely pulverized. First thing, with a strong team, plough deep and turn a furrow each way, outwardly, where you would set a row of plants; then clean out with a shovel down to about seven inches deep below the common level of the surface. Then put into this channel one inch of mellow horse manure. In this case clear manure should be preferred to compost.

Proceed to make trenches in this way 3½ feet apart from the centres; then set out the plants, (one year old should be preferred,) two rows in a trench, about 9 inches apart, and the plants 9 inches from each other in the row, thus:

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When set the crown of the plant will be about 5 inches from the general level of the surface. Cover lightly with a rake. They should be barely covered, as deep covering will be injurious. In hoeing, a little earth is allowed to work down in the trench and fill it up a little, the first season. After heavy frosts in the fall, cut off the tops of the plants, and let them go till the next season. If you please you may put on a little manure. In the course of the next season the trench may be gradually filled up in cultivation, and the cultivator may be used in this operation.

Some persons plant cabbages between the trenches the first year. There should be nothing planted the second year. The asparagus may be cut the third year, but not so many times as afterwards. Cut a little below the surface. Every year spread 5 or more cords of dock mud to the acre. If this be not convenient use other manure, and salt will be an excellent ingredient. A bushel to a square rod will be beneficial, or more may be applied without injury, but perhaps not so much can be used with advantage. Much depends on the price. Only 5 or 10 bushels to the acre will improve the growth and quality of this marine plant. Apply the manure in the fall, and directly over the row of asparagus. In the spring go over with the cultivator to spread the manure evenly.—*Bost. Cult.*

Excretory Duct of the feet of Sheep.—Chancellor Livingston, 1st President of the N. Y. State Agricultural Society, says the legs of sheep are furnished with a duct, which terminates in the fissure of the hoof; from which, when the animal is in health, is secreted a white fluid, but when sickly, these ducts are stopped by the hardening of the fluid. He says he has in some instances found that the sheep were relieved, by merely pressing out the hardened matter with the finger from the orifice of the duct in each foot; it may in some cases be proper to place their feet in warm water, or to use a probe or hand brush for cleansing this passage.

Parsnip Wine.—Wine made of parsnips approaches closely to the malmsey of Madeira, and is made with very little expense or trouble, and is wholesome and palatable.

To every 4 lbs. of parsnips, clean and quartered, put one gallon of water; boil till quite tender; drain them over a sieve, but do not bruise them, as no process will clear the liquor afterwards. Pour the liquor into an open vessel, and to each gallon add 3 lbs. of sugar, and half an ounce of cream of tartar. When cooled to about blood heat, put a little new yeast, or emptyings, let it stand four or five days in a warm room, then put it into a cask, and when the fermentation has subsided, bung tight, and let it stand 8 or 12 months before using.

The months of April and May are the best for getting a good fermentation; and in these temperance times it is an experiment worth trying.

How they use up Sheep in the West.

Ohio must be a great Golgotha for hogs, cattle and sheep. They kill hogs by hecatombs, and oxen by myriads, and what they do not salt down they tumble into pig vats, and steam them up for the lard and the tallow. Sheep, too, have to come up to the slaughter by the ten thousands. Ellsworth, in his late report, gives the following statistics of sheep slaughtering. Messrs. Hollister & Boalt slaughtered last year 5100, which they say yielded, on an average, nine pounds of tallow. Mr. Hollister slaughtered about 3800, which averaged seven and a half pounds of tallow each.

In Cleaveland, Mr. Millford states that 50,000 sheep will be slaughtered the present season. He gives the following schedule of cost and profits:

Cost of sheep, each,	$1 12½
Cost of slaughtering, &c.,	10
Total cost,	$1 22½
Average of tallow, 8 pounds, at 5½ cts.,	44
3 lbs. of wool, each at 33 cents,	99
For hams,	5
Total value,	$1 48
Total cost,	$1 22½
Total profit,	25½

So that they get a pretty fair profit per head. If the English Government takes off their tariff on lard oil, it will open a large market for that article, and the way the pigs will have to bleed will be a caution to old porkers. This manufacturing of lard oil from pigs, and of candles and soap from mutton tallow, will prevent our neighbors of the fat prairies of the far west from glutting our markets by their hogs and sheep, which they grow at a cheaper rate than we do, and thus our home market will remain undisturbed.—*Maine Farmer.*

Preserved Potatoes.

Having occasion to lay in stores for a second best passage across the Atlantic in a sailing vessel, we purchased in Liverpool at in case of Edwards' patent preserved potatoes. We had no time to inquire the process by which they are preserved. All we know of the matter is, that we got a box full of a hard granulated substance, somewhat resembling tapioca or sago.

Place half a pound of this matter in a vessel made boiling hot, pour on it rather more than a pint of boiling water, cover it so as to keep in the steam, and in fifteen minutes you have well cooked and mashed potatoes, which only need seasoning to be as palatable as fresh chenangos or blue-noses. The bill of the patentee declares that potatoes put up in this way occupy but *one sixth* part of their original bulk, they will keep any length of time, and must be invaluable in long voyages. We think, too, that if placed in the market, they would be soon in great demand by families who wish to economise in regard to *help hire.* The facility, neatness and despatch with which a dish of potatoes can be got up this way, is quite charming. The potatoes plainly have been peeled and cooked before. The secret of the process is in the mode of *desiccation,* and we think Yankee ingenuity could not be long in discovering it. The process cannot be very expensive, from the price which the article bears in England. We should think our Maine friends, if they have not done so already, would do well to turn their attention to this matter. Any person who is curious on the subject, can see a specimen of these preserved potatoes at this office.—*Boston Chron.*

Hydraulic Cement.

Messrs. Flett & Star—The following may be useful to some of your readers; it is from the supplement to Ure's Dictionary, an English publication, which work has been recently re-printed in your city.

All sorts of lime are made hydraulic, in the humid way, by mixing slacked lime with solutions of common alum or sulphate of alumina; but the best method consists in employing a solution of the silicate of potash, called liquor of flints, or soluble glass, to mix in with the lime and clay. An hydraulic cement may also be made which will serve for the manufacture of architectural ornaments, by making a paste of pulverized chalk, with a solution of silicate of potash. The said liquor of flints will likewise give chalk and plaster a stony hardness, by merely soaking them in it after they are cut and moulded to a proper shape. On exposure to the air, they get progressively indurated. Superficial hardness may be readily produced by washing over the surface of the chalk, &c., with liquor of flints, by means of a brush. This method affords an easy and elegant method of giving a stony crust to plastered walls and ceilings of apartments; as also to statues and busts, cast in gypsum mixed with chalk. W.

—*N. Y. Mechanic.*

Yeast from Potatoes.

As it is sometimes convenient to know more than one mode of making an article, we will give you an old method of making potato yeast, which we have somewhere met with. Boil potatoes, of the best and most mealy sort, (for poor, heavy, waxy potatoes are good for nothing for this business,) till they are thoroughly done and their skins begin to peel off. Strip off the skins, and mash them up very smooth, and put as much hot water to them as will make the mash of the consistency of common thick cream. Then add to every pound of potatoes two ounces of coarse brown sugar, or molasses will answer, and when blood warm, stir in for every pound of potatoes two spoonsful of old or common yeast. Let this ferment for twenty-four hours.

A pound of potatoes will make in this way very nearly a quart of yeast, and which will keep well for three months—so the cook says. She also says you must lay your bread eight hours before you bake it.—*Maine Farmer.*

Hogs at Cincinnati.—The Cincinnati Gazette says: "We are indebted to Mr. Clearwater for the following statement of the number of hogs slaughtered at Cincinnati and Covington the past season. Instead of giving the names of the several slaughter houses, we number them as we did last season:

No. 1,	36,715 head.
" 2,	29,456 "
" 3,	28,228 "
" 4,	23,612 "
" 5,	16,089 "
" 6,	12,838 "
" 7,	11,905 "
" 8, (at Covington,)	12,384 "
	171,224 head.

We shall know in a few days, the number of slaughtered hogs received this season by wagon and river. We suppose it to be only about 15,000 which would make the entire number packed here this season, 186,228 head. Last season, the entire number packed here was 240,000 head."

Benefits of Geological Surveys.—Dr. Jackson has, in his survey of N. Hampshire, discovered unsuspected mineral treasures. The N. Y. Tribune says:

In the town of Bartlett there was a locality considered worthless; but Dr. Jackson discovered on this lot an iron mine of excellent quality of ore, and inexhaustible in amount; it has been sold since for $10,000. In Eaton a vein of zinc ore was discovered, more abundant than that of Bristol, England. The mine will furnish zinc sufficient to supply all New England. At Warren there is copper ore of a rich character, and in such quantity as to warrant mining operations; it contains 34 per cent of copper, while the richest ores of Cornwall do not contain more than 17 per cent. In Jackson the first vein of tin that has come to light in the United States was discovered; the ore is sufficiently abundant to pay for working.

The lead ores of Eaton and Shelburne have been found to contain a sufficiency of silver to warrant their being wrought for that metal. The lead of Eaton contains two pounds, and that of Sherbune three pounds to the ton. The silver may be separated from the lead without difficulty, by a process described in the Report.

It is believed that no State can boast of so large a catalogue of metals as New Hampshire. Without regarding the metalic bases of the earths and alkalies, there are found in N. Hampshire seventeen metals, viz: iron, zinc, copper, lead, tin, antimony, silver, gold, molybdenum, manganese, chrome, titanium, cadmium, cobalt, arsenic, tungsten, uranium.

Pigiana. *Robert T. Whitten, P. M.,* writes us that Hon. Jacob Main, of Belgrade, recently slaughtered a porker which weighed, when dressed, *seven hundred and sixteen pounds,* and thinks that not bad for those "diggings."—*Maine Far,*

Let Farmers Communicate.—Improvement.

Mr. Editor:—Farmers should be communicative of their agricultural knowledge. They should be as willing to give information to a brother, as they are particularly anxious to receive the like at the hands of others. They should inquire, search, experiment, and endeavor to advance the general agricultural interest by every possible means and measure. What should be thought of a farmer, who, having the necessary right kind of knowledge to double his own harvest—which very properly and prudently he does,—yet, will not impart one iota of the secret to his neighbor, that he may do the same? Such there may be, but assuredly he is unworthy that appellation "brother farmer."

The real genuine farmer is wholly given to the work. Next to his duties due high Heaven, it is his all absorbing topic. He loves to *hear* about farming; he loves to *talk* about farming; the *study* of farming is to his taste. He thinks, reads, composes, reflects and stores his mind with treasures of knowledge applicable to the profession. All other knowledge is acquired only to subserve the interests of this. In this way, the farmer *must* and *will* rise. It is as necessary to the prosperity, the onward and upward march of the farmer, that he study and apply the stores of knowledge, to the work of his hands as in any profession or business whatever. Let him patiently and perseveringly do it then and look up and live.

Farmers should take courage under a view of the immense change in his favor there has been wrought within the last thirty years. Thirty years ago! Where then was the flood of agricultural reading now sent forth to enlighten the land and make glad the hearts of the hearty yeomanry! And what was the state of agricultural science? Did the farmer then suppose science had any thing to do with the practice of husbandry! What too was then the state of agricultural implements? What for a plough did he turn the stubborn glebe with? and what for a cultivator and hoe did he essay to till the half broken field with? Indeed, farmers can tell, for they know.

Farmers under a sense of what has been done and is now being done for them, should look up, respect themselves, and adore that Providence that has so kindly undertaken to advance their general weal.

Respectfully,
B. F Wilbur.

Butlers Vale, Dec. 2, 1845.

Grafting Currants.—The Gardener's Chronicle recommends for the pretty appearance presented as well as for improved flavor, to graft currants of different colors, as the red, black and white, variously intermixed, on stocks trimmed up to a single stem three or four feet high. The tops may be headed down to a compact head, or trained as espaliers in the horizontal or fan method, the two latter modes of training, by the free exposure to sun and air, much improving the quality of the fruit. The importance of trimming the bushes up to single stems to improve the fruit and facilitate clean culture, instead of suffering two hundred and fifty suckers to shoot up all round into a dense brush heap, is very obvious to those who have tried both.

Subsoil Ploughs.—In many soils, not otherwise rich enough for corn, it would be a good practice to make a furrow six inches deep in the fall, with a common plough, then let a subsoil plough run in this furrow ten or twelve inches more; and it would be still better to put corn stalks and other manure in this trench, and listed in when thoroughly wet, with a small plough or hoe; the land to remain in this state till planting time. The subsoil plough is very valuable; by its use the soil will be less wet in great rains, and more moist in great drouth. Where the subsoil is used, in comparison with only the common plough, the yield will be fifty per cent more, and the crop in dry weather always green. The subsoil plough has doubled and frequently trebled the crops.—*Farmer and Gardener.*

Oats—Eighty Bushels per Acre.

Mr. Editor:—If you think the following, in relation to a crop of oats I raised the past season, will be interesting to your readers, it is at your disposal.

I sowed four acres with oats last spring, which had been planted two years previous with corn, and well manured. The yield was eighty bushels to the acre, the oats weighing thirty-five pounds to the bushel. I pro-

cured my seed about forty miles distant, and sowed five bushels to the acre. I attribute the superiority of my crops to the changing of seed, more than to any other one circumstance. Would not our farmers find it to their advantage to take more pains than they ordinarily do to obtain their seed oats from soils different from those which they sow?

I ploughed in the stubble, seeded and rolled the ground immediately after taking off the crop. The grass seed took well and looked promising at the closing in of winter.

D. A.

Ashfield, Feb. 11, 1845.

Eighty bushels of oats per acre is a very large harvest—more than twice as large as the average through the State.

Oats vary more in amount of product per acre than any kind of grain, whether it is owing to a change of seed or to some other cause. We have seen accounts of 100 bushels per acre, and we have noticed that many who have obtained large harvests have sowed as many as five bushels of seed per acre.

This quantity always appeared too large, for the usual rate is three bushels of seed. Perhaps we should make more trials to ascertain the proper quantity of seed. When land is laid to grass, however, with oats, we should never sow the oats thick lest they shade the ground too much for the young grass.—*Mass. Ploughman.*

Singular Freak in a Farrow Cow.—Mr. John Morrell, of Winthrop, had an excellent cow, which had brought a calf regularly every year, and gave milk until calving. Last year she was suffered to go farrow. During the winter she became dry, without any apparent reason or cause, as she was well fed and regularly milked. She went dry about eight weeks, when she was turned to grass, supposing she would make good beef. She soon gave indication of coming to milk again, and on trying her it was found that she had again become a *new milch* cow, and has continued to give milch ever since, though not so abundantly as she formerly did. How do you account for such a freak in the dairy?—*Me. Farmer.*

Honey is, according to Mr. Milton, who has lately published a treatise on bees in England, a universal specific, and among its other valuable properties, he declares that it prevents consumption, and states that that destroyer of human life is not known in countries where haney is regularly taken as an article of food. Those who have less faith in the specific, may perhaps attribute the cause to difference of climate rather than to honey. The Italian singers, it is also affirmed, are greatly indebted to honey, but their practice is to sharpen it with a few drops of acid, though they sometimes take it in a pure state.—*Alb. Cult.*

Fruits of Electricity.—When at Biloxi this autumn, says the Memphis Enquirer, we saw a lemon tree which had been made to produce several crops in quick succession, by the application to its roots of the galvanic battery. The fruit was as perfect as that grown in the natural way.

Hessian Fly in the Wheat.—The Milledgville. (Ga.) Journal of the 25th ult. says—"We learn that the Hessian fly is in the wheat, in several of the neighboring counties, and that their ravages have been dreadful. Whole fields have been totally destroyed by this troublesome insect, and others will yield not more than a fourth of what was confidently anticipated some weeks ago.

WANTED,

A MANAGER FOR A FARM about five miles from Baltimore. He must be honest, sober and industrious, and unless the applicant can bring undoubted testimonials to those qualities, it will be useless for him to apply. Address A. B. at the office of the American Farmer. 3t mh 19

GROUND PLASTER.

The subscriber is now engaged in the grinding of Plaster of Paris for agricultural purposes, and would respectfully inform Farmers and dealers that he is prepared to furnish it of the best quality at the lowest market price, deliverable in any part of the city, or on board Vessels free of expense, application to be made at the Union Plaster Mill, near the Glass House, or at the office No. 6 Bowly's Wharf, corner Wood street.

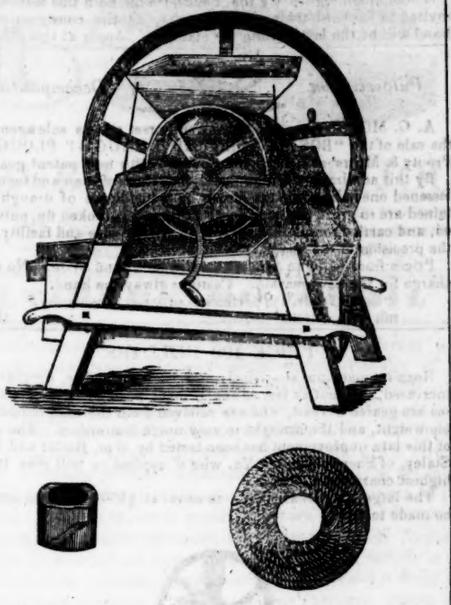
P. S. CHAPPELL, or,
WM. L. HOPKINS, Agent.

GROUND LIMESTONE.

Pulverized Limestone, a good manure for grass, or to use with Guano for sale at 25 cents per bushel, in lots to suit purchasers, by

WILLIAM CHILD,
No. 78 South st. Bowly's whf.
mh 5 4t*

SINCLAIR, JR. & CO'S CORN & COB CRUSHER.

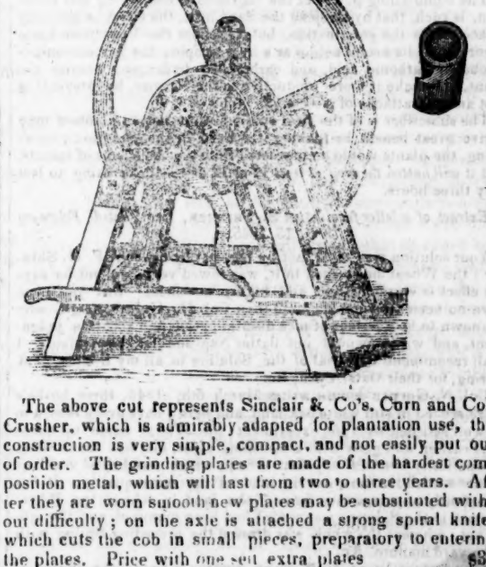


The above cut represents Sinclair & Co's new Corn Mill which is admirably adapted for plantation use, or as a Maryland planter says of them, "every planter having this useful machine becomes his own miller." They grind coarse or fine meal with equal facility, perfection and despatch, at the rate of 2½ or 3 bushels per hour.

When the screen is attached (as shewn in the centre of the cut) and fine meal is required to be ground, it will be necessary to drive the Mill by horse-power, (say 2 horses;) coarse meal for horses may be ground by 2 men with good success.

The grinding plates which are made of the hardest composition metal, will last about 2 years without renewing; after they are worn smooth new ones may be put on without difficulty. A feeder is attached to the axle which is intended to pass the grain into the plates at regular intervals. The feeder is important and obviates the difficulty and objection to Cast Iron Mills generally. Price, with one sett extra plates $40

☞ The feeder and grinding plate (as above) are represented separate from the mill.



The above cut represents Sinclair & Co's. Corn and Cob Crusher, which is admirably adapted for plantation use, the construction is very simple, compact, and not easily put out of order. The grinding plates are made of the hardest composition metal, which will last from two to three years. After they are worn smooth new plates may be substituted without difficulty; on the axle is attached a strong spiral knife, which cuts the cob in small pieces, preparatory to entering the plates. Price with one sett extra plates $30

☞ The knife (as above,) the grinding plates similar to that of the Mill.

CLEAZY'S IMPROVED SELF-SHARPENING PLOUGH.

J. S. EASTMAN, Pratt street, a little west of the Baltimore & Ohio rail road Depot, would invite public attention to this superior implement, both as to its simplicity, cheapness and good work with light draft. He will furnish patterns to manufacturers living out of this state on reasonable terms. may 1

BALTIMORE MARKET, April 15.

Beef, Balt. mess,	10a11	Butter, Glades, No. 1,	13
Do. do. No.1,	9	Do. do.	2, 7a11
Do. prime,	a7	Do. do.	3, 5a7
Pork, mess	13	Do. Western	2, 6a
Do. No. 1	12	Do do.	3, 5a6
Do. prime	a11	Lard, Balt. kegs,	1, a7¼
Do. cargo,	a	Do. do.	2, none
Bacon, hams, Ba. lb	8¼a9	Do Western,	1, 8¼a8½
Do. middlings, "	7¼	Do. do.	2, 5a5¼
Do. shoulders, "	6¼a6½	Do. do. bls	1, 6a6½
Do. asst'd, West.	6¼	Cheese, casks,	6
Do hams,	8a	Do. boxes,	5a8¼
Do. middlings,	5½	Do. extra,	12a15
Do. shoulders,	5¼a		
COTTON—			
Virginia,	9a10	Tennessee, lb.	
Upland,	6½	Alabama,	6¼a7
Louisiana,	6½	Florida,	10a12
North Carolina,	10a11	Mississippi	
LUMBER—			
Georgia Flooring	12a15	Joists & Sc'ling, W.P.	7a10
S. Carolina do	10a12	Joists & Sc'ling, Y.P.	7a10
White Pine, pann'l	25a27	Shingles, W. P.	2a9
Common,	20a22	Shingles, ced'r,	3.00a9.00
Select Cullings,	14a16	Laths, sawed,	1.25a 1.75
Common do	8a10	Laths, split,	50a 1.00
MOLASSES—			
Havana, 1st qu. gl	30a31	New Orleans	26a28
Porto Rico,	29½a	Guadaloupe & Mart	26a28
English Island,		Sugar House,	28a36
SOAPS—			
Baltimore white,	12a14	North'rn, br'n & yel.	3¼a4¼
brown & yell'w	4¼a5¼		
TOBACCO—			
Common	2 a 3½	Yellow,	8 a10
Brown and red,	4 a 5	Fine yellow,	12a14
Ground leaf,	6 a 7	Virginia,	4 a 9
Fine red	6½a 8	Rappahannock,	
wrappery, suitable		Kentucky,	3 a
for segars,	8a13	St. Domingo,	13 a11
Yellow and red,	7a10	Cuba,	15 a38
PLASTER PARIS—			
Cargo, pr ton cash	3.50a	Ground per bbl.	11.2a
SUGARS—			
Hav. wh. 100lbs	9a10.50	St. Croix, 100lbs	7.00a8.00
Do. brown	a7.50	Brazil, white,	a
Porto Rico,	6.75a	Do. brown,	
New Orleans,	5a 5.75	Lump, lb. c.	
FLOUR—We quote			
Superfine How. st., from stores, bl			$4.50a
Do. City Mills,			4.75
Do. Susquehanna,			4.62
Rye, first			3.18a
Corn Meal, kiln dried, per bbl.			2.25
Do. per hhd.			11.75
GRAIN—			
Wheat, white, bu	105a115	Peas, black eye,	50a55
" best Va red	95a100	Clover seed, store	$4.12
" ord. to pri. Md	85a103	Timothy do	2a
Corn, white,	41a	Flaxseed, rough st.	1.25
" yellow Md.	43½a44	Chop'd Rye, 100 lbs.	1.25
Rye, Md.	63a64	Ship Stuff, bus.	20a
Oats, Md.	25a	Brown Stuff,	15a
Beans,	110	Shorts, bushel,	10a
FEATHERS—per lb.			31a
COFFEE—			
Havana,	7 a 8	Java, lb.	10 a12
P. Rico & Laguay.	5¼a6¾	Rio,	6¼a7¼
St. Domingo,	5¼a 6	Triage,	3¼a 4¼
CANDLES—			
Mould, common,	a10	Sperm,	30a31
Do. choice brands,	10½	Wax,	60a65
Dipped,	a 9		

Tobacco.—The receipts have increas'd this week, and the assortme't in market holds out strong inducements for shippers to purchase. The sales of Maryland have been considerable at prices ranging much as last week, which we continue, viz: Inferior and common $2 a $3; middling to good $3. 50 a $5; good $ 6 a $7.50; and fine $8 a $14. Sales of 400 to 500 hhds. Ohio have also been within the range of quotations, viz: common to middling $3 a $4.50; good $5 a 6; fine red and wrappery $6.50 a $10; fine yellow $7.50 a $10; and extra wrappery $11 a $13.—The average of the sales of Ohio is about $5.50 a $6. The inspections of the week are 908 hhds. Maryland; 589 hhds. Ohio; and 49 hhds. Kentucky—total 1538 hds.

Hogs.—Live Hogs have been scarce throughout the week, and sales have been making at $5 a $5.12½ per 100 lbs. The market is now without supplies.

Cattle.—The offerings of Beef cattle at the scales today comprised 330 head, of which 211 were sold to butchers in this city, and 99 were driven to other markets. The prices paid ranged from $2,50 to $3,25 per 100 lbs. on the hoof as in quality, equal to $4,50a$6,25 net. There are now but 20 head in market unsold.

DEVON BULL FOR SALE.

He is of the best breed, very gentle, 4 to 5 years old. The owner having another for his own service, has no use for him, and he will be sold a bargain. Apply at this office. de 18

MARTINEAU'S IRON HORSE-POWER IMPROVED

Mode less liable to get out of order, and cheap to repair, and at less cost than any other machine.

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Threshing Machines, Wheat Fans Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shortest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment.

R. B. CHENOWETH,
corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 46 Pratt street.
Baltimore, mar 31, 1841

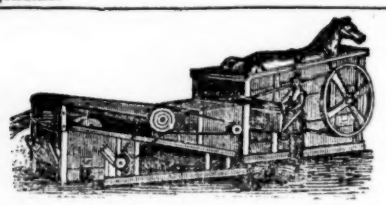
HOVEY'S SEEDLING STRAWBERRY PLANTS,

At $1 per 100; *for sale at this office.* ap 16

AGRICULTURAL IMPLIMENTS.

J. S. Eastman at his old stand (now No. 180 Pratt Street between Charles & Hanover Streets) has on hand a very heavy stock of AGRICULTURAL IMPLEMENTS, consisting of a great variety of Plows & Plow Castings (which are equal to any made in this country) Wheat Fans, Cylindrical Straw Cutters, Horse powers and Thrashing Machines, Corn and Tobacco Cultivators, plain and expanding, Harrows, Farm Carts, Corn Planters of various patterns, and a great variety of other articles, all of which are made of the very best materials both wood and Iron, and in a faithful manner, which will be sold exceedingly low, as he is desirous of disposing of his present stock on hand. Very liberal discount to wholesale purchasers.

Also a good supply of Landreth's superior Garden seeds in store, fresh and genuine. ap 9



WHITMAN'S AGRICULTURAL WAREHOUSE,

No. 2, Eutaw Street, opposite the Eutaw House.

The subscriber feels very grateful for favors the past season, and will now inform his friends and the public, that having enlarged his business, he is now prepared to keep on hand and Manufacture to order, nearly all articles used in the Farming line. Also will keep on hand, an assortment of FIELD & GARDEN SEEDS, IRON, NAILS, HARDWARE, &c.

LIST OF CASH PRICES.

Two Horse Railway Powers, on an improved plan,	$100 00
One Horse " " "	75 00

These Powers work with more ease to the horse, are more durable, and one or two horses on these Powers will do about double the work the same number of horses can on the common sweep Powers. They are portable, and only occupy about one-eighth the room of the Sweep Powers—they are used for driving various kinds of Machinery as well as for Thrashing.

New Threshing Machine, patented March 4th, 1844, $100 00

These machines Thrash and clean the grain at one operation, and with one of my two horse Powers, five men will thrash and clean from ten to twenty-five bushels of wheat the hour; they are simple and durable, may be used in the field or barn, being but very little larger than the common Thrasher.

☞Rights for Southern and Western States which are not sold, can be had by applying to the subscriber.

Improved Thrashers with Straw Carriers, from	$50 to 75
Thrashers, - - - - - -	35 to 60

These Thrashers are more durable and will thrash one-third faster with the same power, than any other now in use.

The Rice, Lomax and Hayford Fanning Mills from	$15 to 30
Clark's Smut Machines from	60 to 100
Corn Shellers "	12 to 45
Cutting Boxes for hand or horsepower	5 to 50
Corn and Cob Crushers,	22 to 50
The Wiley or Mott Plough, all sizes	4.50 to 10
The Davis, Empire and a variety of other ploughs,	4 to 12
Prouty & Mears Centre Draught,	7.50 to 13
Corn and Tobacco Cultivators,	4 to 6
Harrows of all kinds,	6 to 20
Trucks for stores,	5 to 10
Premium Pumps, a new article,	5 to 8
Lukens' celebrated Washing Machine	15 to 25
Horse Rakes,	10 to 12
Ox Yokes and Bows,	4 to 6
Grain Cradles with Scythes or without	2.50 to 5

And a variety of Scythes, Sickels, Hay Rakes and Forks, Hoes, Shovels, Spades, Manure Forks, Axes, Hatchets, Hammers, Grindstones, Wire Sieves, Wove wire of all descriptions, &c. &c &c.

Also, the New York Castings, for the Mott or Wiley Plough, by the piece or ton. Castings for other Ploughs kept constantly on hand, and all kinds of REPAIRING done at short notice and on reasonable terms. EZRA WHITMAN, Jr.

Church Clocks for Steeples with 1—2—3 or 4 pair of hands made to order and warranted.

NORTH DEVON CALVES.

The subscriber offers for sale 4 Full Blood North Devon Bulls, and two Heifer Calves, two of the Bulls are 5 and 6 months old, price $25 each; the two other Bulls are 11 months old, price $30 each; one of the Heifers 12 months old, price $30; the other Heifer 18 months old, price $40; they are beautiful animals, in fine condition, and of a suitable age to ship.

Address JOHN P. E. STANLEY,
46 South Calvert, corner of Lombard Street, Baltimore.
ap 9

RARE CHANCE FOR A DAIRY-MAN.

A gentleman in Carlisle, Pa. wishes to engage with a competent person to take charge of a Dairy and Truck Farm on shares—The farm is of 60 to 70 acres, partly within the borough, in excellent order; there is no opposition to the dairy, and, the only one to the truck business is from a borough 20 miles off. The stock of every description will be furnished—there is a fine stock of Cows and Horses, and all the apparatus for carrying on the business, and excellent dwelling, barn, stabling, and root cellar. Nothing would be required of the person engaging except the labor, and he ought to have about $200 in cash. Apply to the editor of the American Farmer, if by letter, post paid. None but those who can produce unquestionable reference as to character and qualifications need apply. fe 26

POUDRETTE.

Those intending to try the Poudrette on corn this season, are invited to forward their orders at once, as the consignment on hand will be the last in time for planting. Apply at this office.

Pulverization. *Decomposition.*

A. G. MOTT, corner of Ensor and Forest streets sole agent for the sale of the "BOSTON CENTRE DRAUGHT PLOUGH," Prouty & Mears' self sharpening patent, with new patent gearing.

By this admirable arrangement, the labors of man and team are lessened one half, while the power and steadiness of draught obtained are so great that any depth of furrow is broken up, pulverized, and carried completely over, with perfect ease and facility, and the precision of the spade,

Prices from $7.50 to $13, with extra point and share. No extra charge for the new gearing. Castings always on hand.

"Spade labor, the perfection of good husbandry."
mh 5 tf

PRICE 100 DOLLARS.

Reaping machines simplified, and their durability very greatly increased, will cut as fast as any I made prior to 1841; two horses are geared abreast, and are relieved from the once objectionable weight, and the draught is very much diminished. The value of this late improvement has been tested by Wm. Butler and Jacob Staley, of Shepherdstown, Va. who if applied to will give it the highest character.

The large Reapers are made as usual at $170—medium size will be made to order.

My Corn and Cob Crusher, so well known in the South, stands unrivalled—price $25 to $35. OBED HUSSEY.
Baltimore, Jan. 7, 1845. ja 9

HAUTERIVE'S CHEMICAL SOLUTION,

FOR THE IMPROVEMENT OF

Wheat and other Seeds.

The subscriber being the only possessor in the U. States, of the recipe for preparing HAUTERIVE'S CHEMICAL SOLUTION, for which the Society of Encouragement and Agriculture of France, after testing the value of it for three consecutive years, through a commission composed of Scientific Agriculturists and Chemists and after their favorable report, awarded the inventor a premium of 3 000 francs, and a gold medal.

The stimulating power of the ingredents composing this Solution, is such, that by steeping the Seed in it, the effect is not only to accelerate the germination, but to render the Vegetation more vigorous, by its useful action as a hygroscopic; the gaseous emanations of carbonic acid, and carbonated hydrogen, nourish the plant, and make it more productive to the Farmer, by preventing rust and the attacks of insects.

The subscriber is of the firm opinion, that cotton planters may derive great benefit by soaking the Seed in the Solution; by so doing, the plants would be protected from the bad effects of insects, and *it will hasten the crop at least* 10 *or* 12 *days*—the soaking to last only three hours.

Extract of a letter from JOHN S. SKINNER, ESQ., *dated February* 15, 1845.

Your solution was tried, not by me, but by my son, F. G. Skinner; the Wheat he steeped in it, was sowed very late, yet he says the effect is very apparent and highly beneficial But you need have no better recommendation than Col. N. Goldsborough, who is known to be a farmer of nice discrimination and accurate judgement, and withal, would not flatter Neptune for his trident. I shall recommend the trial of the Solution to all my friends, next Spring, for their Oats, Corn, &c.

Col. N. GOLDSBOROUGH writes March 6th, 1845, three bushels were steeped in stiff white oak land, and here I have every reason to be well satisfied with the experiment; the Wheat came up three days earlier, and grew with astonishing vigor, and has maintained a superiority over the adjacent Wheat, which was brined and limed and seeded the same day in land of the same quality. It has constantly appeared thus far as if the land in which the Wheat steeped in the Solution was seeded had been manured, and the other not; whereas the whole was dressed the preceding Spring with barn yard manure, &c.

Commodore JONES, U. S. NAVY, writes: "As to the effects of the Solution on the growing crop, &c. I think very favorable. It has added much to the appearance as well as to growth, &c. (Order, double the quantum used last Fall.")

Many other "opinions" can be seen by calling upon the Agent We cite the above as from gentlemen well known, and on whom great reliance can be placed.

F. W. SWEENY,
No. 54 Buchanan's Wharf,
Is appointed my Sole Agent, for the disposal of the Chemical Solution,—to whom all orders can be addressed.
☞Price $3 for Half, and $5 for Whole Barrels.
L. MONTROP
Baltimore, March 26th, 1845. 4t

AULT'S ENGLISH GARDEN SEEDS.

Just received by the steam ship Hibernia our usual supply of first rate ENGLISH GARDEN SEEDS, consisting in part of the various kinds of Cabbage; Cauliflower; Brocali; Peas; Beans; Lettuce; Carrot; Parsnip; Radish, Beets, &c. &c. It is a fact well known to every gardener of experience that first rate English Garden Seeds produce incomparable better crops and of finer flavor than can be obtained from Seeds raised in this climate; and as we receive these Seeds direct from the growers, who are gentlemen of undonbted respectability and experience, there never has been or will be any mistake or deception in quality or kinds of seed. The present lot are in remarkable fine condition, having been on the water only 15 days. For sale wholesale and retail by

SAML. AULT & SON,
N. W. corner Calvert and Water sts.
mh 26 4t

NEW AND IMPROVED POUDRETTE,

Made by the Lodi Manufacturing Company of New York, may be obtained by application to BRICE & SMITH, Agents,
fe 20 3m No. 6 Bowly's wharf, Baltimore.

POUDRETTE

Of the very best quality for sale. Three barrels for $5, or ten barrels for $15—delivered free of cartage by the New York Poudrette Company, 23 Chambers street, New York. Orders by mail, with the cash, will be promptly attended to, and with the same care as though the purchaser was present, if addressed as above to

D. K. MINOR, Agent.

A supply now on hand from the N. York establishment, by the single barrel, or larger quantity. For sale by

SAML. SANDS,
je 19 office of the Farmer, Baltimore

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned *successors to the late firm of Bentley, Randall & Co.* are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c., to Pork Butchers for heating water for scalding hogs and for *rendering lard*, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and *soap making*, and for many other purposes for all of which they are now in *successful* operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of *two thirds*, and in many instances *fully three fourths*—numerous certificat☞ from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, McCausland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. tf RANDALL & CO.

JAMES MURRAY'S

PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices $25, 30, 35, 40, 45.

ALSO, small MILLS, which received a certificate of merit, for $15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills. Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Also, a second hand Steam Engine, 16 horse power, and the works for two Saw Mills.

Any kind of Machine, Model or Mill work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

☞Orders can be left with J. F Callan, Washington, D. C. S. Sands, Farmer office; or the subscriber,

Mr. Abner Linthcum, jr., and all Machinests are invited to a fair trial of Grinding against my Corn and Cob Crushers, and if I do not do more work, taking the power, quantity, and quality into consideration, I will give them my machine gratice.

Patent Rights for sale by the subsbriber.

o 8 JAS. MURRAY, Millwright, Baltimore.

EXTRA RASPBERRIES.

The subscriber will sell several thousand fine ROOTS of the celebrated Raspberry introduced into this State by the late William Gibson, and which have been generally known in Baltimore and the vicinity as the "GIBSON RASPBERRY."

Orders for plants of this delicious and productive species—the genuineness of which may be relied on—left at No. 7 North Charles street, will be promptly executed at the following prices, viz:

100 roots for	$6
1000 do	$50

Carefully put up and delivered in any part of the city.

JOHN GIBSON,
ap 2 3t Chestnut Hill.